

## REMARKS

### Status of the Claims

- Claims 1-10 and 20-27 are pending in the Application after entry of this amendment.

### Claim Rejections Pursuant to 35 U.S.C. §112

Claims 1-10 and 20-27 are rejected under 35 USC §112, first paragraph, as failing to comply with the written description requirement. Specifically, the Examiner states that the element “the business directory listings are child nodes of the leaf nodes and the business category nodes are parent nodes of the leaf nodes” is not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicant respectfully disagrees. Applicant finds ample support in the originally filed specification on pages 15 and 16. Beginning on page 15 line 25 and ending on page 16 line 12, the paragraph describing the multi-level parent-child node structure is as follows:

Figure 3A shows an example business directory listing taxonomy 340 of business directory listing data that may be maintained by business directory listing data store 320 of Figure 3. Data taxonomy 340 has various levels 345 (top level), 350 (second level), 355 (third level), 360 (*leaf nodes*), and 365 (*directory listing level*). These levels are related in such a manner that data residing in level 345 acts as a parent to data found in level 350. Similarly, *data that resides in level 350 may act as parents to data found in level 355 or data found in level 360. Accordingly, data found in level 365 may be children of data found in level 360.* As shown, each of the various levels may contain a number of data elements. When implemented the lowest level 365 may contain the actual business directory listing information. Correspondingly, level 360, the parent to data of level 365, may serve to categorize the business directory listing information (SIC base directory listings, 365) according to editorialized detailed category designations. Similarly, *level 355 may serve to provide broader category designations for category designations of level 360. Level 350 may provide even broader categorization for data found in levels 355 or 360. Lastly, level 345 may provide the broadest category designations for data of level 350.* (page 15, line 25- page 16, line 12).

Applicant submits that, as described on the page 15-16 paragraph above, the business directory listings (365 level) are children of the leaf nodes (360 level). Accordingly, the leaf

nodes (360) are parent nodes of the business directory listings (365 level). Also, as described in the page 15-16 paragraph above, data that resides in level 350 may act as parents to data found in level 355 or data found in level 360 (leaf nodes). Applicant notes that level 350, as stated in the paragraph on pages 15 and 16, may provide even broader categorization for data found in levels 355 or 360 (leaf nodes). Applicant submits that this description of parent and child relationships between the business directory listings (level 365) and the leaf nodes (level 360), and between the leaf nodes (level 360) and the higher levels of categorization (levels 355, 350, and 345) provides ample basis for the phrase “the business directory listings are child nodes of the leaf nodes and the business category nodes are parent nodes of the leaf nodes”.

Applicant further submits that one of skill in the relevant art would not have difficulty with the parent and child relationship concept after reading the above-mentioned paragraph while viewing Figure 3A. Thus, Applicant traverses and respectfully asks for withdrawal of the 35 USC §112 rejection.

**Claim Rejections Pursuant to 35 U.S.C. §103 (a)**

Claims 1-27 stand rejected pursuant to 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,516,311 to Yacoby et al. in view of the Examiner’s statement of obviousness and motivation. Applicant respectfully traverses the rejection because the combination of Yacoby et al. and the Examiner’s statement do not disclose all elements of Claim 1.

The Examiner cites col. 9, lines 13-25 of Jacoby et al. to teach part (a) of Claim 1 which recites “providing a computer-based directory of business listings and advertisements, said directory being stored in a data store and comprising data organized as a tree having at least three levels of nodes, wherein a plurality of said nodes are representative of business categories, a plurality of said nodes are leaf level nodes, and a plurality of said nodes are business directory listings having standard industry codes (SIC) associated therewith, wherein only said leaf nodes map to said business directory listing nodes, wherein the business directory listings are child nodes of the leaf nodes and the business category nodes are parent nodes of the leaf nodes”.

Applicant notes that the aspects of "...data organized as a tree having at least three levels of nodes, wherein a plurality of said nodes are representative of business categories, a plurality of said nodes are leaf level nodes, and a plurality of said nodes are business directory listings having standard industry codes (SIC) associated therewith, wherein only said leaf nodes map to said business directory listing nodes, wherein the business directory listings are child nodes of the leaf nodes and the business category nodes are parent nodes of the leaf nodes" are noticeably missing from Jacoby et al.

Specifically, Jacoby et al. at col. 9 lines 13-25 states:

The advertising database is comprised of records having fields for advertiser criteria and associated therewith advertising objects. In a preferred embodiment of the present invention, the database contains records having fields for advertiser criteria which typically consists of fields for business category/industrial code, business subcategory, location, sublocation. The advertising object can be static (e.g., HTML text), dynamic (e.g., Java Applet) and/or multimedia (e.g., audio and video). The object may contain a hyperlink to advertisers website; contain a button/queue to be print; contain a button or queue to be saved; and/or allow the user to compose a response e-mail. In the alternative, this database can be a part of the directory database. (col. 9 lines 13-25).

Applicants fail to find any mention of (1) data organized as a tree having at least three levels of nodes, wherein a plurality of said nodes are representative of business categories, a plurality of said nodes are leaf level nodes, and a plurality of said nodes are business directory listings having standard industry codes (SIC) associated therewith, (2) wherein only said leaf nodes map to said business directory listing nodes, and (3) wherein the business directory listings are child nodes of the leaf nodes and the business category nodes are parent nodes of the leaf nodes.

Applicant notes that Jacoby et al. teaches a "field" for a business category/industrial code, and a "field" for a business subcategory (See col. 9 lines 13-25). No underlying structure or organization is provided. Additionally, Jacoby et al. does not explicitly define what a "business category/industrial code" is. Assuming, only for the sake of argument, that the "business category/industrial code" in Jacoby et al. is a single item and that it represents a standard industry code (SIC), then the other "business *subcategory*" item is logically at a level lower than the SIC code because it is a subcategory of the SIC code. Applicant submits that Claim 1 recites no level lower than the SIC codes in contrast to Jacoby et al.

Accordingly, the Examiner has cited aspects that are beyond the scope of and outside the recitation of Claim 1 while failing to cite all three levels of nodes as recited in Claim 1.

In addition, Applicant notes that Jacoby et al. teaches location and sublocation. Assuming, for the sake of argument only, that location and sublocation are relevant to Claim 1, then there may be, at most two levels of organization taught by Jacoby et al.; item and sub-item. However, this also assumes that location and sublocation are related as parent and child and not simply as finer resolutions of an item detail..

Given the assumptions that (a) a location and sublocation are relevant to Claim 1 and (b) are related to each other as parent and child, then Jacoby et al., even in its most broad reading, fails to disclose at least three levels of nodes as recited in Claim 1. Accordingly, Jacoby et al. fails to disclose all of the elements of Claim 1 part (a). The Examiner's statement concerning obviousness and motivation does not cure the deficiency.

Also, Jacoby et al. fails to teach or suggest that a leaf node level maps only to the business directory listing as recited in Claim 1. No mention of such an exclusive mapping is presented in Jacoby et al. for standard industrial codes (SIC) as recited in Claim 1.

Moreover, Jacoby et al. fails to disclose the specific combination of having at least three levels of nodes, wherein a plurality of said nodes are representative of business categories, a plurality of said nodes are leaf level nodes, and a plurality of said nodes are business directory listings having standard industry codes (SIC) associated therewith, wherein only said leaf nodes map to said business directory listing nodes, wherein the business directory listings are child nodes of the leaf nodes and the business category nodes are parent nodes of the leaf nodes. Not only is the specific combination not taught by Jacoby et al., but specific elements of the combination, such as parent and child node relationships and at least three levels of nodes are completely missing from Jacoby et al. Applicants conclude that Jacoby et al. fails to disclose all of the elements of Claim 1 part (a).

The Examiner cites col. 15, lines 1-41 of Jacoby et al. to teach part (c) of Claim 1 which recites "storing said desired business listing and/or advertisement in said directory according to said node tree using at least one of said business categories".

Specifically, Jacoby et al. at col. 15, lines 11-24 defines a method of searching a directory database using a telephone number and retrieving information. No mention is made of storing a business directory listing in a directory according to a node tree. Jacoby et al.

does not disclose a node tree or any other kind of node organization. Accordingly, Applicant submits that the element of storing said desired business listing and/or advertisement in said directory according to the node tree organization using at least one of said business categories is absent from the teachings of Jacoby et al. The Examiner's statement does not cure the deficiency.

Applicant also notes that Jacoby et al. requires a telephone number and a web site URL be present in the taught directory database. Specifically, at col. 7 lines 60-62, Jacoby et al teaches:

*At a minimum*, a record on a registrant in the directory database is comprised of a registrant telephone number and associated therewith the registrant web site page. (col 7, lines 60-62).

Claim 1 does not require a telephone number and a web site page; whereas the purpose of Jacoby et al. would be frustrated by removing the telephone and web page field entries. This observation strongly implies that the teaching of Jacoby et al. and the recitation of Claim 1 represent different inventions. Col. 3, lines 21-23 of Jacoby et al. states:

It is object of the present invention to provide a simple and quick method for an Internet user to navigate to a web page by typing a telephone number. (col. 3 lines 21-23).

As mentioned above, the invention of Claim 1 does not recite a telephone number and web page because they are not required in contrast to the teaching of Jacoby et al.

Applicants note that independent Claims 1, 5, 6, and 20 recite, among other things, a tree having at least three levels of nodes and business directory listings being child nodes of the leaf nodes and the business category nodes are parent nodes of the leaf nodes; these items not taught or suggested by Jacoby et al. or the Examiner's statement.

Applicants submit that a prima facie case of obviousness has not been made with respect to pending Claims 1-10 and 20-27 because all elements of the claims are not taught or suggested by the combination of Jacoby et al. and the Examiners statement. Specifically, the elements of (1) data organized as a tree having at least three levels of nodes, (2) only the leaf nodes map to the business directory nodes, (3) the business directory listings are child nodes of the leaf nodes and the business category nodes are parent nodes of the leaf nodes, and (4)

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storing the desired business directory listing and/or advertisement in the directory according to the node tree, are not taught or suggested by the combination.

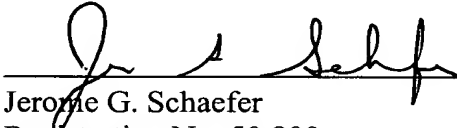
Accordingly, Applicants respectfully request withdrawal of the 35 U.S.C. §103(a) rejection and reconsideration of Claims 1-10 and 20-27 as the pending claims patentably define over the cited art.

**Conclusion**

Applicants respectfully submit that the arguments and amendments effectively traverse the rejections of the cited art. Applicants respectfully request reconsideration for all pending claims.

Respectfully Submitted,

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